To: Daly, Eric[Daly.Eric@epa.gov]; Kappelman, David[Kappelman.David@epa.gov]; Lisichenko, Peter[Peter.Lisichenko@westonsolutions.com]; Jimenez, Christopher[Jimenez.Christopher@epa.gov]

From: Nguyen, Lyndsey

Sent: Thur 10/6/2016 5:00:11 PM

Subject: RE: Niagara Falls Blvd Area 5 Gamma Scan

Wow, my math is so wrong! Ok yeah, don't try to equate the two. Just look at the pretty colors and then we will look at what the samples (pCi/g) tell us about the colors.

Lyndsey Lyndsey Nguyen Environmental Response Team-Las Vegas Phone: 702.784.8018

Cell: 702-373-3756

Email: Nguyen.Lyndsey@EPA.gov

----Original Message-----From: Nguyen, Lyndsey

Sent: Thursday, October 06, 2016 8:28 AM

To: Daly, Eric <Daly.Eric@epa.gov>; Kappelman, David <Kappelman.David@epa.gov>; Lisichenko, Peter <Peter.Lisichenko@westonsolutions.com>; Jimenez, Christopher <Jimenez.Christopher@epa.gov> Subject: RE: Niagara Falls Blvd Area 5 Gamma Scan

Well... Ok, yeah, sure, you could eye ball both sets of scans but I would not merge the data into one. The detector Dave used is a 4x4 Nal detector not a 3x3 Nal detector. A larger detector means a greater probability of interactions (i.e. radiation interacting with the Nal crystal) which means a greater sensitivity. You can see the difference in sensitivity if you compare both data products. The 4x4 detector will have more distinctive and defined areas that a 3x3 detector may lump together.

Rule of thumb for both sets of data:

3x3 detector: We used roughly 17,500 cps for our background, I think.

4x4 detector: Dave told me that the background was roughly 3000 cpm (i.e. multiply by 60sec/min you would get 18,000 cps.)

Remember: Just compare qualitatively (how many times above background)

Lyndsey Lyndsey Nguyen Environmental Response Team-Las Vegas Phone: 702.784.8018 Cell: 702-373-3756

----Original Message----

From: Daly, Eric

Sent: Thursday, October 06, 2016 8:06 AM

To: Kappelman, David <Kappelman.David@epa.gov>; Nguyen, Lyndsey <Nguyen.Lyndsey@epa.gov>;

Lisichenko, Peter <Peter.Lisichenko@westonsolutions.com>; Jimenez, Christopher

<Jimenez.Christopher@epa.gov>

Email: Nguyen.Lyndsey@EPA.gov

Subject: RE: Niagara Falls Blvd Area 5 Gamma Scan

Thanks for this. This is in counts per second. I am trying to compare what I know. Background for us was around 30,000 CPM? Does that mean we take those ranges and multiply by 60?

----Original Message----

From: Kappelman, David

Sent: Wednesday, October 05, 2016 3:49 PM

To: Daly, Eric <Daly.Eric@epa.gov>; Nguyen, Lyndsey <Nguyen.Lyndsey@epa.gov>; Lisichenko, Peter <Peter.Lisichenko@westonsolutions.com>; Jimenez, Christopher <Jimenez.Christopher@epa.gov>

Subject: Niagara Falls Blvd Area 5 Gamma Scan

Here is a Google Earth KMZ link with the Contoured data as well as the ESRI Project data set that was collected today.

We should talk about where to take the samples in Area 5 to ensure that it will meet the intended purposes of your data needs for waste profiling and volume estimation. Note that the count rate is in counts per second instead of the counts per minute from the VIPER 3X3. A Viper Telemetry run was accomplished during the same survey with the 3x3 and is available on the VIPER laptop and the VIPER data server. Remember that is gamma data only and that there may be higher alpha nuclide concentrations that are not in secular equilibrium with the daughters nuclides that have a gamma signature.

The additional files are the ESRI project that I exported from the Survey Data as well.

Please call if you have any questions.

David Kappelman USEPA Environmental Response Team 513-240-6840

Google Earth streams the world over wired and wireless networks enabling users to virtually go anywhere on the planet and see places in photographic detail. This is not like any map you have ever seen. This is a 3D model of the real world, based on real satellite images combined with maps, guides to restaurants, hotels, entertainment, businesses and more. You can zoom from space to street level instantly and then pan or jump from place to place, city to city, even country to country. Get Google Earth. Put the world in perspective. (http://earth.google.com)